

Weak Definites and Kinds of Events

Florian Schwarz
Dept. of Linguistics and IRCS
University of Pennsylvania

March 13th
Workshop on the Syntax and Semantics of Pseudo-Incorporation
35th annual DGfS Conference
University of Potsdam

- The Phenomenon
- The Questions
- Attempts at Answers
- Further Properties of Weak Definites
- Open Issues and Outlook

Definites without uniqueness

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- (2) Every accident victim was **taken to the hospital**

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Distributional Restrictions

- **Lexical** restrictions (nouns, verbs, prepositions)
- Generally **incompatible with modifiers**
- Generally only available for **objects**

The Questions

- Why are the definites **interpreted in a non-standard way** in these cases?
→ What happened to the **uniqueness** requirement?
- Where do the **distributional restrictions** come from?
- **Why** is **the definite article** used here in the first place?
(→ cross-linguistically common pattern! (Schwarz to appear))
- How do these cases relate to **other non-standard combinations** of arguments and verbs? (Pseudo-Incorporation)

Ambiguity of definite article or Fixed Constructions?

Not satisfactory as an explanation of systematic phenomena

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Kind-denoting definites (Aguilar-Guevara and Zwarts 2011)

- Definite introduces **kind**
- Verb includes **realization relation**

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Regular definites in kind-denoting verb phrases **Proposal here**

- Definites start out with **regular meaning**
- Shifted to **predicate meaning**
- verb variant that yields a **kind of event** (or state)

Not just Associative Anaphora

Associative Anaphora

(4) Every race-car driver tightly gripped **the steering wheel**.

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While initially tempting, seeing Weak Definites as a case of Associative Anaphora **fails to capture crucial differences**:

- Dependence on **contextual support**
- Role of **Uniqueness**
- Support of **anaphora**

Role of Contextual Support

Associative Anaphora need some type of **contextual anchoring**:

- (5) ??Every student tightly gripped **the steering wheel**.
- (6) The students were participating in a car race. As the race was about to start, every student tightly gripped **the steering wheel**.

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- (5) ??Every student tightly gripped **the steering wheel**.
- (6) The students were participating in a car race. As the race was about to start, every student tightly gripped **the steering wheel**.

No contextual support needed for Weak Definites

- (7) Every accident victim was taken to **the hospital**.
- (8) Every student was taken to **the hospital**.

Associative anaphora gives rise to uniqueness effects, even under quantification:

- (9) #(As the race was about to start,) every race-car driver checked **the tire**.

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- (9) #(As the race was about to start,) every race-car driver checked **the tire**.

No standard uniqueness effects with Weak Definites

- (10) Every accident victim ended up **in the hospital** for weeks. In fact, most of them ended up having to be treated in **several different hospitals** because of complications with their various injuries.

Support of Anaphora

Associative Anaphora Definites support anaphoric pronouns:

- (11) The race-car drivers each got to test-drive a Porsche of the latest model...
- (12) After breakfast, every driver got into his car, checked out **the steering wheel** and discovered that despite the humid weather **it** felt nice and cool and allowed for a firm grip.

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Weak Definites generally do not support anaphora

- (13) Every accident victim was taken to **the hospital** and discovered that **it** had a beautiful roof-top garden.

(→ No Weak Definite reading)

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Weak Definites and Kinds of Events

- Verb phrases containing Weak Definites also seem to express typical types of activities (or states)
- Proposal here:
Weak Definites are regular definites that appear in verb phrases that denote kinds of events (or states)

Widespread activities (as reported on the web)

- (14) For news employees, pickling artichokes is a wide-spread activity.
- (15) Mushroom farming is a wide-spread activity around the world.

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Widespread Events with Weak Definites

- (16) **Reading the newspaper** is a wide-spread activity.
- (17) **#Reading the book** is a wide-spread activity.

Chierchia-style semantics for kind-reference

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Verb denotations that map properties to kinds of events

- variants of verbs that take **predicates** as their arguments (Dayal 2011)
- **New proposal**: resulting verb phrase denotes a **kind of event**

$$\llbracket read_{TV} \rrbracket = \lambda x. \lambda e. [read(e) \ \& \ Th(e) = x]$$

$$\llbracket read_{kind} \rrbracket = \lambda P_{e, st}. \lambda s. \iota^* \{ e \mid read(e) \ \& \ \exists x [P(x)(e) \ \& \ Th(e) = x] \ \& \ e \leq s \}$$

\rightsquigarrow 'The reading-P event kind' : For a given P and world w ,
the **maximal event-plurality of P-reading events**

Shifting back from kinds to properties of events

Toy example: **read newspaper** \approx **newspaper-reading**

$$(18) \quad k_{\text{newspaper-read}} = \lambda s. \iota^* \{e \mid \text{read}(e) \ \& \ \exists x[\text{newspaper}(x)(e) \ \& \ \text{Th}(e) = x] \ \& \ e \leq s\}$$

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Shifting back to property of events to combine with **Ag**

$$(19) \quad \llbracket \mathbf{Ag} \rrbracket = \lambda p_{\langle s, t \rangle}. \lambda x. \lambda e. [p(e) \ \& \ \text{Ag}(e) = x]$$

$$(20) \quad \text{If } P \text{ is a function from predicates of events } (\langle s, t \rangle) \text{ to properties } (\langle e, st \rangle) \text{ and } k \text{ denotes a kind of event, then}$$
$$P(k) = \lambda x. \lambda e. [P(\cup k)(x)(e)]$$

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A Chierchia style \cup -operator for event kinds:

$$(21) \quad \cup k_{\text{newspaper-read}} = \lambda e \exists e' [e' \leq k_{\text{newspaper-read}}(s_e) \ \& \ e \leq e']$$

Type-shifting the definite to a predicate-type

$$(22) \quad \llbracket \text{the newspaper} \rrbracket = \lambda s. \iota [P(s)]$$

$$(23) \quad \textit{ident} = \lambda I_{\langle s, e \rangle}. \lambda y. \lambda s. [y = I(s)]$$

$$(24) \quad \textit{ident}(\llbracket \text{the newspaper} \rrbracket) = \lambda y. \lambda s. [y = \iota [\textit{newspaper}(s)]]$$

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Applying the kind-variant of the verb to this:

$$(25) \quad \llbracket \text{read}_{\text{kind}} \textit{ident}(\text{the newspaper}) \rrbracket = k_{\text{read-the-newspaper}}$$

$$\begin{aligned} &= \lambda s. \iota^* \{ e \mid \text{read}(e) \\ &\quad \& \exists x [x = \iota[\text{newspaper}(e)] \& Th(e) = x] \\ &\quad \& e \leq s \} \end{aligned}$$

Shifting back to property of events

$$\begin{aligned} \cup k_{\text{read-the-newspaper}} &= \lambda e \exists e' [e \leq e' \ \& \ e' \leq k_{\text{book-read}}(s_e)] \\ &= \lambda e \exists e' [e \leq e' \ \& \\ &\quad e' \leq [\lambda s. \iota^* \{e \mid \text{read}(e) \ \& \\ &\quad \exists x [x = \iota[\text{newspaper}(e)] \ \& \ Th(e) = x] \ \& \ e \leq s\}(s_e)]] \end{aligned}$$

- **uniqueness** is **relativized to the events e** that form the basis of the kind
- it is therefore **trivially satisfied**
- this will **also ensure (possible) covariation** with quantificational examples

(Everyone was reading the newspaper)

Lack of Anaphora

Existential quantification over object is embedded in kind-formation process, so we don't expect to be able to pick up the object anaphorically.

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Enrichment

- Enrichment is commonly involved when talking about kinds
- 'Typical activities' presumably come with a very specific set of properties

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Distributional restrictions

- Kind reference (at least of a certain type) is known to be **restricted to established kinds** (the coke bottle vs. the green bottle)
- Parallel restrictions at play that **limit** the availability of **Weak Definite in kind-denoting verb phrases**.

Additional Properties of Weak Definites

Restriction to Objects

Follows on view taken here that **subjects are introduced externally**
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More Non-Uniqueness

- **taking the train** can involve **multiple trains!**
- **But:** still only **one train at a time**
- **Hidden uniqueness** effect rears its head:
events out of which the kind is constructed have to **involve only one individual** of the relevant type.

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Contrast: Plural Weak Definites

(26) **John cleaned the windows.**

Hidden Existence Presupposition?

After an accident on a cruise ship, in the middle of the Atlantic:

(27) #We have to get you to the hospital somehow!

(28) ✓We have to get you to a hospital somehow!

Even Weak Definites seem to require the existence of an individual with the relevant property within reach.

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Contrast with bare singulars?

Doctor / law enforcement official in same situation:

(29) #I will have to send you to **the hospital** for this.

(30) ✓I will have to send you **to jail** for this.

Atelicity

(31) **John read the newspaper for hours and hours.**

- unlike **read the book**
- Atelicity follows from formulation of U -operator above
- Do telicity-enforcing modifiers render Weak Definite reading unavailable?

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Multiple and partial newspaper readings

- Given the formulation here, readings of **multiple newspapers** are included as parts of the kind $k_{\text{read-the-newspaper}}$
- Moreover, **partial newspaper readings** are also included

Summary

- Weak Definites are **regular definites**
- Standard effects of **uniqueness get hidden by kind-formation process** at the level of the verb phrase
- This gives rise to **further non-standard properties of these verb phrases** and helps to account for restrictions on Weak Definites
- Still, **remnants of standard definite interpretation seem to re-surface** once we look more closely.

Kind-referring definites

- Similar in spirit, but **kind-reference at the level of the definite**
- Verb meanings with built-in realization relation

Points of Divergence

- Role of standard uniqueness & existence presuppositions
 - Cruise-ship example - **not just mere existence?**
 - Differences between **singular and plural?**
- Aspectual properties
 - Atelicity of **read the newspaper**
 - **Partial** newspaper readings

Open Questions

- Relation between implicit VP-kind-formation and **overt morphology**
(e.g., **-ing** in nominalization with same or similar effect)
- How does the present version **generalize to PP-cases**
(kinds of states of being in a certain type of place?)
- What does it take to be an **established kind of events**?
- What determines whether a **bare singular or a Weak Definite** gets used?
- Does the analysis here **extend to (pseudo-) incorporation** more generally?

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